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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,852	05/03/2001	Peter De Block	1524	6623
7590	05/21/2004		EXAMINER	
Striker Striker & Stenby 103 East Neck Road Huntington, NY 11743			COLE, LAURA C	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/786,852	DE BLOCK, PETER
	Examiner Laura C Cole	Art Unit 1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 April 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 19,20,22 and 25-37 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 19,20,22,25 and 28-37 is/are allowed.
- 6) Claim(s) 26 and 27 is/are rejected.
- 7) Claim(s) 25-34 and 37 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 09 March 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No. _____.
 - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. 03312004 .
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: "Data Sheet".

DETAILED ACTION

Double Patenting

1. Claim 34 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 33. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Objections

2. Claims 25-34, and 37 are objected to because of the following informalities:
Claims 25, 26, 28, 30, 33, and 34 each have incorrect punctuation ("..") at the end of each of the claims.

Claim 29 is missing a period (".") at the end of the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swanepoel, USPN 5,325,564 in view of Appel, USPN 3,192,551.

Swanepoel discloses the invention as claimed, including a support element (10), a wiper strip (12), a connecting device (14), wherein the support element is an

elongated flat bar (Figure 3) to which the wiper strip (12) is attached (see Figures 1-3), wherein the support element has a length, width, and thickness such that $20L^2 < bd^2 < 40L^2$ in which L is given in meters and b and d are given in millimeters, see Column B of the data sheet. The highlighted portion of Column B indicates that over the range of widths (b) and thicknesses (d), the support element of Swanepoel uses width and thickness parameters that fall into the range of $20L^2 < bd^2 < 40L^2$. Further, Swanepoel includes that the support element has a curvature when not loaded by the arm (see Figure 2), wherein the curvature along a coordinate (s) has values such that a second derivative of the curvature as a function of this coordinate (s) is essentially proportional to a contact force distribution p(s) (Column 1 Lines 23-28). Swanepoel does not disclose that the support element has a substantially rectangular cross sectional profile with a substantially constant width b and a substantially constant thickness d.

Appel discloses a windshield wiper blade assembly that includes a number of embodiments relating to the properties of the supporting element (elasticity, curvature, load, length, dimensions) in order to provide a constant loading of pressure throughout the length of the wiper blade (Column 1 Lines 16-41). Appel demonstrates assemblies with support elements of constant widths and thickness (Figure 1) and tapering widths and thickness (Figures 2 and 3).

It would have been obvious for one of ordinary skill in the art to modify Swanepoel and have the support element be a substantially rectangular cross sectional profile with a substantially constant width and thickness, as Appel teaches, in order to provide a substantially uniform pressure on a flat windshield surface. Further it would

have been obvious for one of ordinary skill in the art to use values of width and thickness of Swanepoel presents that are in the range of $20L^2 < bd^2 < 40L^2$ to optimize the support element to have a certain critical result. Furthermore, it is not inventive to discover the optimum or workable ranges by routine experimentation. See MPEP 2144.05 II A.

4. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swanepoel, USPN 5,325,564 in view of Appel, USPN 3,192,551.

Swanepoel and Appel disclose all elements above, however Swanepoel does not include a support element that is comprised of two spring bars that each has a width. In Appel, Figures 6, and 10-15 display two individual bars having separate widths that would add up to a total width when computing the pressure-curvature relationship (Column 2 Lines 37-41). The "gap" between the bars is provided as a securement means of a rib (40) for a wiper blade.

It would have been obvious for one of ordinary skill in the art to modify Swanepoel to have two individual bars as Appel teaches in order to accommodate an alternative method of securing a wiper blade to the support element while maintaining a pressure and geometric relationship.

Allowable Subject Matter

5. Claims 19-20, 22, 25, and 28-37 are allowed.
6. The following is a statement of reasons for the indication of allowable subject matter:

None of the prior art made of record includes a wiper blade comprising a support element, wiper strip, wiper arm, the cross sectional profile in which there is a value less than 0.009 and less than 0.005, or less than 0.5° and less than 0.3°, and in where the force is an actual contact force exerted on the wiper blade by the wiper arm *in condition when it is pressed against a window*. The “force” of Swanepoel is the force to straighten the support element.

Further, none of the prior art made of record includes a support element having a curvature along a coordinate which follows a span of the support element, having values such that a second derivative of the curvature as a function of this coordinate being proportional to a contact force distribution, wherein the contact force distribution *decreases toward at least one end*. Swanepoel discloses the opposite, in that the contact force distribution increases towards at least one end (Column 1 Lines 23-28). Also, none of the prior art includes that the contact force distribution is greater in a region approximately halfway between a center and an end of the wiper blade than it is at the end of the wiper blade.

Applicants Arguments

7. In the response and supplemental response, filed 10 February 2004 and 08 April 2004 respectively, the Applicant contends:

- A. In regards to Swanepoel '650, the 1N force is not the force that presses the wiper arm onto the wiper blade.
- B. Swanepoel '650 and '564 fail to show or suggest the substantially constant width and thickness.

C. The wiper blade of Swanepoel '564 lies outside of the range provided in the present application.

D. Swanepoel '564 does not provide *substantially* constant width and thickness.

Response to Arguments

8. Applicant's arguments A-D, see responses, filed 10 February 2004 and 08 April 2004, with respect to the rejection(s) of claim(s) 19-37 under 35 U.S.C. 102 (b) to Swanepoel '650 and '564 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Swanepoel ('564) in view of Appel.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LCC

LCC

18 May 2004

Terence H. Till
Terence H. Till
Primary Examiner